

Interseeding Multi Species Cover Crop into Silage Corn.

By Mark Doely SCT Columbus MT

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County: Stillwater

Average Annual Precip: 13-14" **MLRA:** 58AC, Sedimentry Plain Central

Dominant Soil Type: Attewan Loam 0 to 4% slopes

Acres: 83

Planting Date Corn: 5-14-20

Seeding Rate Corn: 38,000 seeds per acre Planting Date Annual Rye Grass: 6-15-2020

Cover Crop Seeding Rate:
OMRI-Clover-Red- 0.5lbs./acre
P-Annual Ryegrass - 30lbs./acre
P-Nitro Radish - 0.3lbs./acre
Turnip-Purple Top - 0.3lbs./acre
Impact Forage Collards - 0.4lbs./acre

Seeding Method: 3 Point broadcast spreader

Corn Height: 16"

Previous Crop and Year: Silage Corn

Herbicides: Pre: Roundup

Post:

Insecticides/Fungicides: Fertilizer: Nitrogen Irrigation: Center Pivot

Corn Chopped: 9-15-20 - 9-18-20

Silage Yield: 36 ton/acre **Next Crop:** Silage corn 5-20-21



Fig. 1. Multi Species Cover Crop seeded 6-16-2020 Mark Doely SCT Columbus, MT.

Fig. 2. Monthly precipitation at Columbus, MT. Western Regional Climate Center, station #241938.

Columbus	J	F	M	Α	M	J	J	Α	S	0	N	D	Total
30 yr avg 1981-2010	0.61	0.67	1.08	1.85	2.69	2.27	1.18	.93	1.31	0.93	0.64	0.57	14.99
2019	0.59	1.45	0.51	2.83	3.60	2.65	2.88	0.72	5.01	1.39	0.73	0.22	22.58
2019	0.18	0.92	1.15	0.94	2.24	3.40	0.56	0.87	0.53	2.67	0.95	0.21	14.62

Introduction:

The cover crop was broadcasted into the corn on 6-15-2020. The corn height was 16". The idea is to interseed the covercrop mix so it has a chance to get some growth before the corn canopies. That way when the corn is taken off it will have a good start. The field is under a center pivot irrigation system, the sprinkler applied a half on an inch of water immediately after planting and was followed by one inch of rain.

Results:

The first field visit was 7-6-2020 multiple species are present, annual ryegrass, clover, and turnips. Corn was 42' tall. 7-13-2020 some of the ryegrass was 6" tall and the turnips 6 1/2" tall. The consistancy of the cover crop across the field is much better than the previous year. Silage harvest started 9-14-2020 and finished 9-18-2020. The fall had one cold spell and then turned relatively warm up to the date when we clipped the field on 11-3-2020. The sprinkler was run 2 times after silage harvest putting on a half inch per irrigation. Three clippings were done on the field and were air dried. The dry weight figured out to be 1,134lbs per acre.





Fig. 2. Cover crop 7-13-2020



Fig. 3. Cover crop at chopping. 9-15-2020





The purpose of the interseeding the cover crop was to add some diversity and provide some fall grazing. This field is in a continuous corn rotation and is used for fall and winter grazing. The cover crop this year was much more even throuhout the field and with the warmer fall continued to grow after the silage harvest. The cover crop this year was broadcast by the local fertilizer company using truck mounted broadcaster. Overall the producer was extremely happy with this years production.